# CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

**NABL** - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377


Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-12/233d/Cube/2016-17 17.02.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

| | | |
|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Technical Manager (West),** KRIDL, Bangalore. |
| * Name of the work | : | Construction of RCC drain in Basaveshwara road 5th D Cross two side and other roads in Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore. |
| * Reference | : | AEE/SSD/PR/95/2016-17 Dated: 30.12.2016 |
| * Sample ID | : | RCC Drain Concrete |
| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 17.02.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 20.01.2017 | 17.02.2017 | 8.155 | 514.8 | 22.88 |
| 2 | 20.01.2017 | 17.02.2017 | 8.299 | 518.3 | 23.04 |
| 3 | 20.01.2017 | 17.02.2017 | 8.345 | 528.9 | 23.51 |

*Information is furnished by the Customer/Representative.

Civil-Tech Consultants & Engineers Bangalore

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VIDYARANI P.K.
Technical Manager

AE-13
17/2
ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ಬಾಸವರಾಜ್ಯ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಮಾ.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು


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| * Sample ID | : RCC Drain Concrete |
| Technical Reference | : IS: 516-1959 (RA-2013) |
| Size of cubes | : 150mmx150mmx150mm |
| Cross Sectional Area | : 22500 $mm^2$ |
| * Grade of Concrete | : $M_{20}$ |
| Compressive Strength as on | : $28^{th}$ day |
| Sample Received on | : 17.02.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 20.01.2017 | 17.02.2017 | 8.130 | 483.5 | 21.49 |
| 2 | 20.01.2017 | 17.02.2017 | 8.299 | 498.3 | 22.15 |
| 3 | 20.01.2017 | 17.02.2017 | 8.358 | 512.3 | 22.77 |

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Civil-Tech Consultants & Engineers Bangalore

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Technical Manager

AE-13

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| Technical Reference | : | IS: 516-1959 (RA-2013) |
| Size of cubes | : | 150mmx150mmx150mm |
| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 18.02.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 21.01.2017 | 18.02.2017 | 8.165 | 475.5 | 21.13 |
| 2 | 21.01.2017 | 18.02.2017 | 8.233 | 493.2 | 21.92 |
| 3 | 21.01.2017 | 18.02.2017 | 8.389 | 503.2 | 22.36 |

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T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-12/233d/Cube/2016-17 18.02.2017

## TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

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|---|---|---|
| * Customer | : | **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore. |
| * Agency | : | **Technical Manager (West),** KRIDL, Bangalore. |
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| Cross Sectional Area | : | 22500 $mm^2$ |
| * Grade of Concrete | : | $M_{20}$ |
| Compressive Strength as on | : | $28^{th}$ day |
| Sample Received on | : | 18.02.2017 |

| Sl.No. | Date of casting | Date of testing | Weight of cube (Kg) | Failure load (KN) | Compressive strength ($N/mm^2$) |
|---|---|---|---|---|---|
| 1 | 21.01.2017 | 18.02.2017 | 8.208 | 505.6 | 22.47 |
| 2 | 21.01.2017 | 18.02.2017 | 8.335 | 519.3 | 23.08 |
| 3 | 21.01.2017 | 18.02.2017 | 8.415 | 536.9 | 23.86 |

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AE-13

18/2

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T-2377

Job No.: CTCE/BBMP/KRIDL/W.No.13/CSR-12/233d/C.C.Core/2016-17 25.01.2017

## TEST REPORT ON CONCRETE CORE

* **Name of Customer** : **Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* **Name of Agency** : **Technical Manager (West),** KRIDL, Bangalore.
* **Name of work** : Construction of RCC drain in Basaveshwara road 5th D Cross two side and other roads in Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore.
* **Reference** AEE/SSD/PR/95/2016-17 Dated: 30.12.2016

**Techinical Reference** : IS:516-1959 (Reaffirmed 2008), SP-24:1983.

**Sample ID** : Precast slab

**Sample Received on** : 20.01.2017

**Date of Testing** : 25.01.2017

| Sl. No. | Dia of Core D (mm) | Height of Core H (mm) | Core Wt (Kg) | Density of Core (kg / $m^3$) | H / D | Correction factor (Based on H/D) | Failure Load (kN) | Core Strength ( $N/mm^2$) | Correction Factor for the Dia. (Strength of the Core x 1.08) | Corrected Cylinder Compressive Strength ($N/mm^2$) | Equivalent Cube Compressive Strength ($N/mm^2$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 50.00 | 78.00 | 0.385 | 2513.83 | 1.56 | 0.952 | 31.25 | 15.92 | 17.19 | 18.05 | 22.56 |
| 2 | 50.00 | 79.00 | 0.390 | 2514.25 | 1.58 | 0.955 | 32.85 | 16.73 | 18.07 | 17.25 | 21.56 |
| 3 | 50.00 | 80.00 | 0.397 | 2527.38 | 1.60 | 0.957 | 33.90 | 17.27 | 18.65 | 17.84 | 22.30 |

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25/1

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* **Name of Agency** : **Technical Manager (West),** KRIDL, Bangalore.
* **Name of work** : Construction of RCC drain in Basaveshwara road 5th D Cross two side and other roads in Ward No.13, Shettyhalli Sub Division, BBMP, Bangalore.
* **Reference** AEE/SSD/PR/95/2016-17 Dated: 30.12.2016

**Techinical Reference** : IS:516-1959 (Reaffirmed 2008), SP-24:1983.

**Sample ID** : Precast slab

**Sample Received on** : 20.01.2017

**Date of Testing** : 25.01.2017

| Sl. No. | Dia of Core D (mm) | Height of Core H (mm) | Core Wt (Kg) | Density of Core (kg / $m^3$) | H / D | Correction factor (Based on H/D) | Failure Load (kN) | Core Strength ( $N/mm^2$) | Correction Factor for the Dia. (Strength of the Core x 1.08) | Corrected Cylinder Compressive Strength ($N/mm^2$) | Equivalent Cube Compressive Strength ($N/mm^2$) |
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